

STIC Search Report

STIC Database Tracking Number 154527

TO: John Cooney

Location: REM 10D61

Art Unit : 1711 May 26, 2005

Case Serial Number: 10/807227

From: Mrs. Kendra Banks

Location: EIC 1700

REM 4B28

Phone: 571-272-2516

Kendra.Mellerson@uspto.gov

Search Notes

No Cases Reported

US 6,271,278



SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: John Coonzy Examiner #:69756 Date: 5/26/05 Art Unit: 17/1 Phone Number 30 571-1272-1070 Serial Number: 10/867, 227
Mail Box and Bldg/Room Location: 10061 Results Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submitted, please prioritize searches in order of need.
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.
Title of Invention: Hydronel Composites and Superporous hydronel composites but fast swelling, high mechanical strength, and superabsorbent properties
Inventors (please provide full names):
Kinam Park, Jun Chen, Haesun Park
Earliest Priority Filing Date: 5/13/97 3 3
For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.
Litigation Review Reiss Appl. #10/807, 227 of PAT #6, 271, 278 to app. 08/855,49
Reiss Appl. #10/807, 227
of PAT #6,271,278 to app. 08/855,490

110 Cases Repubel

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Current session 26/05/2005

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26/05/05 17*52*42 QUESTEL.ORBIT (TM) 1998

Last connection: 25/05/05 15*10*09

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Query/Command: FILE PLUSPAT

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Search statement

Query/Command: US6271278/PN

** SS 1: Results 1

Search statement 2

Query/Command: PRT FULL NONSTOP LEGALALL

1/1 PLUSPAT - ©QUESTEL-ORBIT - image

US6271278 B1 20010807 [US6271278]

TI (B1) Hydrogel composites and superporous hydrogel composites having fast swelling, high mechanical strength, and superabsorbent properties

(B1) PURDUE RESEARCH FOUNDATION (US) PA

Purdue Research Foundation, West Lafayette IN [US] PA0

(B1) PARK HAESUN (US); CHEN JUN (US); PARK KINAM (US) IN

AP US85549997 19970513 [1997US-0855499]

US85549997 19970513 [1997US-0855499] PR

IC (B1) C08F-036/04

EC A61L-015/60 C08F-251/00 C08F-291/00

ORIGINAL (O): 521150000; CROSS-REFERENCE (X): 521102000 PCL 521109100 521121000 521125000 521128000 521130000 521140000 521142000 521146000 521149000 521182000 521183000 521186000 521187000

Corresponding document DT

CT

US3551556; US3641237; US3826678; US4178361; US4525527; US4529739; US4649164: US4801457: US5002814: US5089606; US5147343; US5149335; US5154713; US5292777; US5324561; US5338766; US5352448; US5403870; US5424265; US5451613; US5462972; US5624967; US5750585; WO9727884

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STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

AB

A superporous hydrogel composite is formed by polymerizing one or more ethylenically-unsaturated monomers, and a multiolefinic crosslinking agent, in the presence of particles of a disintegrant and a blowing agent. The disintegrant, which rapidly absorbs water, serves to greatly increase the mechanical strength of the superporous hydrogel and significantly shorten the time required to absorb

water and swell. Superporous hydrogel composites prepared by this method have an average pore size in the range of 10 MU m to 3,000 MU m. Preferred particles of disintegrant include natural and synthetic charged polymers, such as crosslinked sodium carboxymethylcellulose, crosslinked sodium starch glycolate, and crosslinked polyvinylpyrrolidone. The blowing agent is preferably a compound that releases gas bubbles upon acidification, such as NaHCO3. Improved hydrogel composites formed without a blowing agent are also provided.

UP - 2001-34

Search statement 2

Query/Command: FILE INPADOC

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Cost estimated for the last database search :	0.02 USD
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Cost estimated for the last database search :	
Estimated total session cost :	3.71 USD
LITA - Time in minutes: 0,01 The cost estimation below is based on Questel's standard price list Estimated cost:	0 02 1190
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Search statement 1	

Query/Command: FAM US6271278/PN

1 Patent Groups

** SS 1: Results 10

Search statement 2

Query/Command: FAMSTATE NONSTOP

1/10 INPADOC - @INPADOC

PN - AU 736940 B2 20010809 [AU-736940]

TI - HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGTH, AND SUPERABSORBENT PROPERTIES

IN - PARK KINAM; CHEN JUN; PARK HAESUN

PA - PURDUE RESEARCH FOUNDATION

AP - AU 69326/98-A 19980508 [1998AU-0069326]

PR - WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] US 855499/97-A 19970513 [1997US-0855499]

IC - B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00

2/10 INPADOC - @INPADOC

PN - AU 69326/98 A1 19981208 [AU9869326]

TI - HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGHT, AND SUPERABSORBENT PROPERTIES

IN - PARK KINAM; CHEN JUN; PARK HAESUN

PA - KINAM PARK

AP - AU 69326/98-A 19980508 [1998AU-0069326]

PR - WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] US 855499/97-A 19970513 [1997US-0855499]

IC - B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00

3/10 INPADOC - @INPADOC

PN - BR 9809815 A 20000627 [BR9809815]

TI - COMPOSTOS HIDROGEL E COMPOSTOS HIDORGEL SUPERPOROSOS POSSUINDO PROPRIEDADES DE INTUMESCIMENTO RAPIDO, ALTA RESISTENCIA MECANICA E SUPER ABSORVENCIA

IN - PARK KINAM; CHEN JUN; PARK HAESUN

PA - PURDUE RESEARCH FOUNDATION [US]

AP - BR 9809815/98-A 19980508 [1998BR-0009815]

PR - WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] US 855499/97-A 19970513 [1997US-0855499]

B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00 IC

4/10 INPADOC - @INPADOC

CA 2289756 AA 19981119 [CA2289756] PN

HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL TI COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGTH. AND SUPERABSORBENT PROPERTIES COMPOSITES D'HYDROGEL ET COMPOSITES D'HYDROGEL SUPERPOREUX AVEC ACTION GONFLANTE RAPIDE, RESISTANCE MECANIQUE ELEVEE ET PROPRIETES SUPERABSORBANTES

LA **ENG**

CHEN JUN [US]; PARK HAESUN [US]; PARK KINAM [US] IN

PURDUE RESEARCH FOUNDATION [US] PA

CA 2289756/98-A 19980508 [1998CA-2289756] AP

WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] PR US 855499/97-A 19970513 [1997US-0855499]

B01J-020/28; C08J-009/00; C08L-033/00; C08L-039/06; A61L-015/60 IC

1/1 LEGALI - ©EPO

PN CA2289756 A1 19981119 [CA2289756]

CA2289756 19980508 [1998CA-2289756] AP

20030403 CA/AFNE-A [+] ACTE -

NATIONAL PHASE ENTRY **EFFECTIVE DATE: 19991115**

20030820 CA/EEER-A [+] **EXAMINATION REQUEST EFFECTIVE DATE: 20030506**

2004-11 UP

5/10 INPADOC - @INPADOC

CN 1264321 A 20000823 [CN1264321] PN

TI Hydrogel composites and superporous hydrogel composites having fast swelling, high mechanical strenght, and superabsorbent properties

PARK KINAM [US]; CHEN JUN [US]; PARK HEISEN [US] IN

PUDU RES FOUNDATION [US] PA

CN 98806514/98-A 19980508 [1998CN-0806514] AP

US 855499/97-A 19970513 [1997US-0855499] PR

B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00 IC

6/10 INPADOC - @INPADOC .

EP 988108 A1 20000329 [EP-988108] PN

TI - HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGHT, AND SUPERABSORBENT PROPERTIES

LA - ENG

IN - PARK KINAM [US]; CHEN JUN [US]; PARK HAESUN [US]

PA - PURDUE RESEARCH FOUNDATION [US]

AP - EP 98915058/98-A 19980508 [1998EP-0915058]

PR - WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] US 855499/97-A 19970513 [1997US-0855499]

IC - B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00

DS - AT* BE* CH* CY* DE* DK* ES* FI* FR* GB* GR* IE* IT* LI* LU* MC* NL* PT* SE*

1/1 LEGALI - ©EPO

PN - EP0988108 A1 20000329 [EP-988108]

AP - EP98915058 19980508 [1998EP-0915058]

ACTE - 20000329 EP/AK-A [+]

DESIGNATED CONTRACTING STATES:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000329 EP/17P-A [+]
REQUEST FOR EXAMINATION FILED

EFFECTIVE DATE: 19991213

20000412 EP/RBV-A [+]

DESIGNATED CONTRACTING STATES (CORRECTION):

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

20000503 EP/RAX-A

EXTENSION OF THE EUROPEAN PATENT TO (CORRECTION)
AL PAYMENT 20000211;LT PAYMENT 20000211;LV PAYMENT
20000211;MK PAYMENT 20000211;RO PAYMENT 20000211;SI PAYMENT
20000211

20000607 EP/RIN1-A INVENTOR (CORRECTION) PARK, KINAM

20000607 EP/RIN1-A INVENTOR (CORRECTION) CHEN, JUN

20000607 EP/RIN1-A INVENTOR (CORRECTION) PARK, HAESUN

20050504 EP/RTI1-A

SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGHT, AND SUPERABSORBENT PROPERTIES

UP - 2005-18

7/10 INPADOC - @INPADOC

PN - JP 2002501563 T2 20020115 [JP2002501563]

AP - JP 548968/98-A 19980508 [1998JP-0548968]

PR - WO 9800686/98(IB)-W 19980508 [1998WO-IB00686] US 855499/97-A 19970513 [1997US-0855499]

IC - C08L-101/00; A61F-013/53; A61L-015/60; B01J-020/26; C08F-002/44; A61K-031/765; A61K-047/32; A61L-027/00; A61P-003/04

8/10 INPADOC - @INPADOC

PN - US 6271278 BA 20010807 [US6271278]

TI - HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGTH, AND SUPERABSORBENT PROPERTIES

IN - PARK KINAM [US]; CHEN JUN [US]; PARK HAESUN [US]

PA - PURDUE RESEARCH FOUNDATION [US]

AP - US 855499/97-A 19970513 [1997US-0855499]

PR - US 855499/97-A 19970513 [1997US-0855499]

IC - C08F-036/04

9/10 INPADOC - ©INPADOC

PN - US 2001038831 AA 20011108 [US20010038831]

TI - SUPER-ABSORBENT HYDROGEL FOAMS

IN - PARK KIHAM [US]; PARK HAESUN [US]

PA - PARK KIHAM [US]; PARK HAESUN [US]

AP - US 811248/01-A 20010316 [2001US-0811248]

PR - US 811248/01-A 20010316 [2001US-0811248]

US 855499/97-A3 19970513 [1997US-0855499]

IC - A61K-031/74; C08J-009/04; A61K-031/765; A61K-031/785; A61K-031/78

10/10 INPADOC - @INPADOC

PN - WO 9851408 A1 19981119 [WO9851408]

TI - HYDROGEL COMPOSITES AND SUPERPOROUS HYDROGEL COMPOSITES HAVING FAST SWELLING, HIGH MECHANICAL STRENGHT, AND SUPERABSORBENT PROPERTIES

LA - ENG

IN - PARK KINAM [US]; CHEN JUN [US]; PARK HAESUN [US]

PA - PARK KINAM [US]

WO 9800686/98(IB)-A 19980508 [1998WO-IB00686] AP

US 855499/97-A 19970513 [1997US-0855499] PR

- B01J-020/28; C08L-033/00; C08L-039/06; A61L-015/60; C08J-009/00 IC

AL* AM* AT* AU* AZ* BA* BB* BG* BR* BY* CA* CH* CN* CZ* DE* DS DK* EE* ES* FI* GB* GE* GH* GM* GW* HU* ID* IL* IS* JP* KE* KG* KR* KZ* LC* LK* LR* LS* LT* LU* LV* MD* MG* MK* MN* MW* MX* NO* NZ* PL* PT* RO* RU* SD* SE* SG* SI* SK* SL* TJ* TM* TR* TT* UA* UG* UZ* VN* YU* ZW* GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

1/1 LEGALI - ©EPO

WO9851408 A1 19981119 [WO9851408] PN

WOIB9800686 19980508 [1998WO-IB00686] AP

19981119 WO/AK [+] ACTE -

> DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT

AL AM AT AU AZ BA BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

19981119 WO/AL [+]

DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

19990114 WO/DFPE

REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO **EXPIRATION OF 19TH MONTH FROM PRIORITY DATE**

19990407 WO/121

EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION

19991112 WO/ENP

ENTRY INTO THE NATIONAL PHASE IN:

JP 1998 548968A [1998JP-0548968]

19991115 WO/ENP

ENTRY INTO THE NATIONAL PHASE IN:

CA 2289756A [1998CA-2289756]

20000309 WO/REG; DE/8642 [-]

DE: IMPACT ABOLISHED FOR DE

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UP - 2003-22

Search statement 2

DATE: MAY 26, 2005

LIBRARY: PATENT FILE: ALL

Your search request is: PATNO IS 6271278

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For further explanation, press the H key (for HELP) and then the ENTER key.

LEVEL 1 - 1 PATENT

2. 6271278 , August 7, 2001 , Hydrogel composites and superporous hydrogel composites having fast swelling, high mechanical strength, and superabsorbent properties, Park, Kinam - West Lafayette, Indiana; Chen, Jun - Hatfield, Pennsylvania; Park, Haesun - West Lafayette, Indiana, 855499 (08), Purdue Research Foundation, West Lafayette, Indiana, 02, October 28, 1998 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., PURDUE RESEARCH FOUNDATION PURDUE UNIVERSITY 1063 HOVDE HALL WEST LAFAYETTE INDIANA 47907, Reel and Frame Number: 09544/0875

CORE TERMS: hydrogel, superporous, swelling, monomer, sample, composite, polymer, dried, polymerization, foam ...

LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6271278

<=11> Get Drawing Sheet 1 of 5

August 7, 2001

Hydrogel composites and superporous hydrogel composites having fast swelling, high mechanical strength, and superabsorbent properties

REISSUE: March 22, 2004 - Reissue Application filed Ex. Gp.: 1713; Re. S.N.

10/807,227 (O.G. June 22, 2004)

APPL-NO: 855499 (08)

FILED-DATE: May 13, 1997

GRANTED-DATE: August 7, 2001

CORE TERMS: hydrogel, superporous, swelling, monomer, sample, composite,

polymer, dried, polymerization, foam ...

6271278 OR 6,271,278

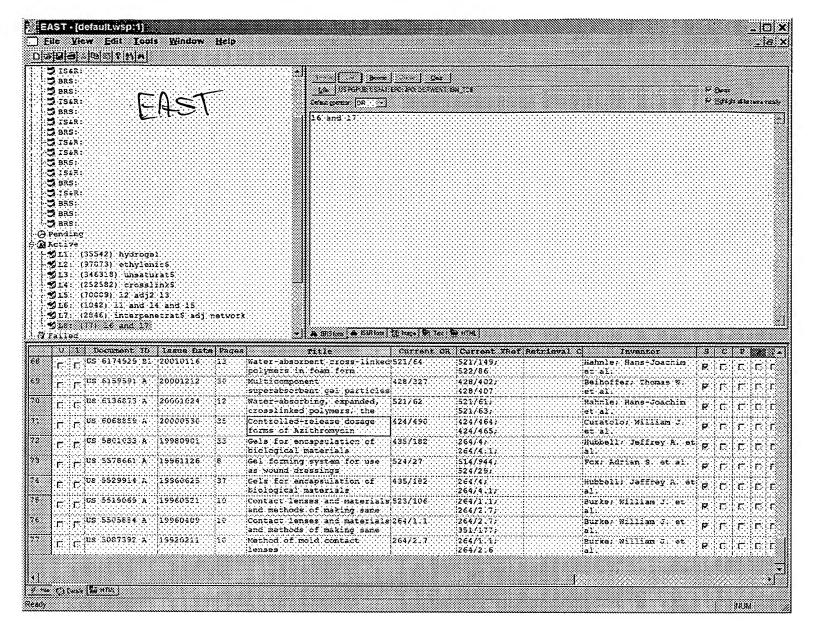
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